

# CPAP DEVICE CONSIDERATIONS

The Department of Health and Family Services, Division of Public Health, Bureau of Local Health Support and EMS, the EMS Board, and the Physician Advisory Committee do not endorse any specific brand, make, manufacturer, or distributor of CPAP devices. When choosing a CPAP device for use in the pre-hospital setting, however the following points should be considered:

1. Fixed Flow versus Variable Flow - Fixed flow devices deliver a pre-set (usually 35%) concentration of oxygen. Variable flow devices allow the provider to adjust the concentration of oxygen from 21% to 100%. The following are a list of pros and cons related to each.

## Fixed

- Simple to use
- Less oxygen consumption

## Variable

- More complex to use
- Higher oxygen consumption

Data indicates that the vast majority of CPAP patients improve on a fixed rate of 35% FiO<sub>2</sub> since the primary abnormality is poor ventilation rather than oxygenation. Fixed flow devices have the capability of providing additional oxygen via the mask or by applying nasal cannula oxygen to the patient.

2. Must be completely latex free.
3. Comfort and seal of the mask.
4. Ease of assembly and application.
5. Positive Expiratory End Pressure (PEEP) valve must ensure accurate and reliable pressures and ensure against exceeding set pressure.
6. Ease of removing and applying PEEP valve or gaining access to the patients' mouth to administer repeated doses of nitroglycerin.
7. Ease and ability to administer in-line continuous nebulized medications during use.
8. Compatibility with the receiving hospital's equipment.
9. Cost of devices: Base price of equipment (flow meter and quick connect hoses). Cost of disposable supplies (pre-packaged mask, PEEP valve, tubing and assorted materials for single patient use).

*Watch for new products (CPAP devices) becoming available that are easier to use and less costly to purchase.*